CALIFORNIA BAY-DELTA AUTHORITY

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-Meeting Notice-

Bay-Delta Science Program's

Contaminant Stressors in the Bay-Delta Watershed

February 4 & 5, 2004
9:00am – 5:00pm
Bay-Delta Room
California Bay-Delta Authority
650 Capitol Mall, 5th Floor
Sacramento, CA

Background information:

The issue of contaminants within the waters of the San Francisco Bay-Delta is daunting and complex. The contaminant stressors are chemically diverse and generally come from many sources including: agricultural and mine drainage, urban runoff, sewage effluent, and industry. Estimates of input into Bay-Delta waters are as high as 40,000 tons annually. Their chemistry and biological effects in our system is as complex and varied as the contaminants themselves. Individual organisms can be exposed to contaminant stressors, singly and in combination throughout their live cycles. Periodic episodes of toxicity are observed throughout our watershed and in many cases the causative agent(s) remain unidentified. Furthermore, the toxicity from exposure to multiple contaminants may not be additive and may result in unexpected effects. In addition to direct mortality, research has suggested that many chemicals present in our watershed have the potential to affect species recruitment by disrupting crucial processes of reproduction and development. Environmental contaminants can also affect critical species indirectly through the food web by bioaccumulation or affecting the abundance of prey items themselves. Ecological models which link the health of the individual to different levels of biological organization can be useful tools for understanding complex biological interactions and for generating testable hypotheses. Efforts to model the effects of physical, chemical and biotic stressors on higher order biological processes are starting to take shape. The development of these models must rely heavily on interdisciplinary and inter-institutional cooperation and incorporate data on the various stressors to which critical species are exposed. Within the Bay-Delta, models of stressor impacts would greatly facilitate the process of adaptive management.

Purpose of Workshop:

The Science Program has organized this workshop to provide a forum for open discussion of the pressing issues regarding aquatic contaminants in the Bay-Delta watershed from a scientific and resource management perspective. With the guidance of a panel of expert science advisors, the workshop will address the following:

- Evaluate, summarize, and prioritize knowledge gaps regarding chemical contaminants in the Bay-Delta;
- Identify the ways in which contaminant stressor information is needed to improve these assessments;

- Address the need to link the health of individual organisms to higher biological orders (population, community, ecosystem);
- Discuss what role can population and ecosystem dynamics models play in generating novel hypotheses regarding the impacts of contaminants on critical species;
- Educate attendees (scientists, policy makers, managers, and stakeholders) on the scope, threat, and challenges that contaminants pose to Bay-Delta restoration and management;
- Develop a science agenda that emphasizes interdisciplinary and inter-institutional cooperation to address the major scientific challenges posed by chemical contaminants in the Bay-Delta.

Agenda:
Visit our website (http://calwater.ca.gov/calendar/calendar.shtml) for agenda updates.

For More Information:
- Registration for the event is not required. For more information contact Jana Machula, at the Bay-Delta Science Program, janam@calwater.ca.gov or 916-445-0715.
- Please allow time to go through security check-point at the entrance of the building and abide by standard security procedures: no weapons, video, or photo equipment, including photo cell phones.
- If you need reasonable accommodation due to a disability, please contact Pauline Nevins, California Bay-Delta Program at (916) 445-5511, TDD (800) 735-2929.